

ABSTRACT

This invention is intended to match the material quality of a product to target data, even when a materials quality model is insufficient in prediction accuracy. The heating step of heating a metallic material, the processing step of rolling, forging, or leveling the metallic material, and the cooling step of cooling the metallic material are each conducted at least once, then prior to manufacture of a metallic product of a desired size and shape, qualitative data of the metallic material is measured at a position by means of a materials quality sensor 10 installed in a manufacturing line, and modifications based on measured data are made to heating, processing, or cooling conditions in at least one of the above steps upstream with respect to the materials quality sensor so that the quality of the metallic material at the measuring position may agree with target data.